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2 **In the Claims**

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4 Claims 1-45 remain in the application are listed below.

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6 1. (Original) A method of providing a user interface (UI) comprising:
7 rendering a DHTML document from an XML document using at least one
8 XSLT transformation (XSL-T); and
9 presenting a user interface based, at least in part, on the XSL-T that was
10 used to render the DHTML document.

11
12 2. (Original) The method of claim 1, wherein said presenting comprises
13 automatically presenting the user interface.

14
15 3. (Original) The method of claim 1, wherein the user interface
16 comprises a context block.

17
18 4. (Original) The method of claim 1, wherein the user interface
19 comprises an in-document user interface.

20
21 5. (Original) The method of claim 1, wherein the user interface
22 comprises an accelerator.

1 6. (Original) The method of claim 1, wherein the user interface
2 comprises one or more of the following: a context block, an in-document user
3 interface, and an accelerator.

4
5 7. (Original) The method of claim 1, wherein the presenting comprises
6 deciding which user interface to present from a number of user interfaces.

7
8 8. (Original) The method of claim 7, wherein deciding comprises:
9 ascertaining a user's actions within a document; and
10 presenting a user interface based on the ascertained user's actions.

11
12 9. (Original) One or more computer-readable media having computer-
13 readable instructions thereon which, when executed by a computer, implement the
14 method of claim 1.

15
16 10. (Original) A method of providing a user interface comprising:
17 considering multiple parameters one of which includes an XSL-T file; and
18 based upon the considered parameters, rendering a user interface sufficient
19 to enable a user to interact with a DHTML view that has been rendered by the
20 XSL-T file from an XML document.

21
22 11. (Original) The method of claim 10, wherein one parameter
23 comprises a user location within a particular document.

1 12. (Original) The method of claim 10, wherein one parameter
2 comprises a portion of an XML schema that corresponds to a user's selection.

3
4 13. (Original) The method of claim 10, wherein one parameter
5 comprises one or more UI types that would be desirable to generate.

6
7 14. (Original) The method of claim 10, wherein the parameters
8 comprise:

9 a user location within a particular document;

10 a portion of an XML schema that corresponds to a user's selection; and

11 one or more UI types that would be desirable to generate.

12
13 15. (Original) The method of claim 10, wherein the considering of the
14 multiple parameters comprises considering one or more constructs within an XSL-
15 T file.

16
17 16. (Original) The method of claim 10, wherein the considering of the
18 multiple parameters comprises identifying from multiple user interfaces which
19 user interfaces are more suited to have their functionalities provided by an in-
20 document user interface.

21
22 17. (Original) The method of claim 10 further comprising modifying
23 structure of the XML document based upon the user engaging the user interface.

1 **18.** (Original) The method of claim 10, wherein the user interface
2 comprises an in-document user interface.

3
4 **19.** (Original) One or more computer-readable media having computer-
5 readable instructions thereon which, when executed by a computer, implement the
6 method of claim 10.

7
8 **20.** (Original) A method of providing a user interface comprising:
9 making a selection in a DHTML view;
10 determining, based upon the selection, a corresponding selection in an
11 XML document;
12 determining, based upon the corresponding selection in the XML
13 document, a corresponding portion of an XML schema;
14 determining, based upon the XML schema portion, one or more types of
15 action that can be undertaken;
16 producing one or more operations that can be undertaken for various
17 determined action types; and
18 determining, from an XSL-T file that rendered the DHTML view, a user
19 interface type that can be displayed for a user and used to implement the one or
20 more operations.

21
22 **21.** (Original) The method of claim 20, wherein the making of the
23 selection comprises moving a cursor to a particular area within a document.
24
25

1 22. (Original) The method of claim 20, wherein the action types
2 correspond to ways in which a user might manipulate a portion of a document they
3 have selected.

4
5 23. (Original) The method of claim 20, wherein the user interfaces
6 comprise in document user interfaces.

7
8 24. (Original) The method of claim 20 further comprising displaying an
9 in-document user interface of a determined interface type for the user.

10
11 25. (Original) The method of claim 24 further comprising manipulating
12 structure of the XML document based upon user input through the displayed user
13 interface.

14
15 26. (Original) One or more computer-readable media having computer-
16 readable instructions thereon which, when executed by a computer, implement the
17 method of claim 20.

18
19 27. (Original) A method of manipulating an XML document
20 comprising:

21 defining one or more crystals, each of which containing one or more
22 behaviors and an XSLT transformation for transforming an XML document into a
23 DHTML view;

24 using the one or more crystals to render a DHTML view from an XML
25 document;

1 enabling user interaction with the DHTML view; and
2 mapping, via the one or more behaviors, user interactions in the DHTML
3 view to the XML document.
4

5 **28.** (Original) The method of claim 27, wherein the one or more
6 behaviors are data-shape dependent.
7

8 **29.** (Original) The method of claim 27, wherein the one or more
9 behaviors are data-shape dependent on a data shape defined by the XML
10 document.
11

12 **30.** (Original) The method of claim 27, wherein the one or more
13 behaviors are configured to function independently of an XML schema of which
14 the XML document is an instance.
15

16 **31.** (Original) The method of claim 27, wherein the one or more
17 behaviors are configured to function independently of XML tags that might be
18 used.
19

20 **32.** (Original) The method of claim 27, wherein the behaviors are
21 implemented as binary code.
22

23 **33.** (Original) The method of claim 27, wherein the crystals are reusable
24 across different XML documents.
25

1 **34.** (Original) One or more computer-readable media having computer-
2 readable instructions thereon which, when executed by a computer, implement the
3 method of claim 27.

4
5 **35.** (Original) One or more computer-readable media having computer-
6 readable instructions thereon which, when executed by a computer, cause the
7 computer to:

8 provide multiple crystals, each of which containing one or more behaviors
9 and an XSLT transformation for transforming an XML document into a DHTML
10 view;

11 use one or more of the crystals to render a DHTML view from an XML
12 document;

13 attach at least one behavior to at least one DHTML tag;

14 ascertain that a user has interacted with a DHTML view associated with the
15 at least one DHTML tag; and

16 use the behavior associated with the at least one DHTML tag to map a user
17 interaction back to the XML document and make associated structural changes in
18 the XML document.

19
20 **36.** (Original) The one or more computer-readable media of claim 35,
21 wherein the behaviors are implemented as binary code.

22
23 **37.** (Original) The one or more computer-readable media of claim 35,
24 wherein the behaviors are data shape dependent.
25

1 **38.** (Original) The one or more computer-readable media of claim 35,
2 wherein the behaviors are not dependent upon an XML schema.

3
4 **39.** (Original) A method of manipulating an XML document
5 comprising:

6 associating one or more behaviors with a DHTML tag in a DHTML view
7 that has been rendered from an XML document; and

8 responsive to a user interacting with a DHTML view associated with the
9 DHTML tag, using the one or more behaviors to map user interactions to the XML
10 document and effect structural changes on the XML document.

11
12 **40.** (Original) The method of claim 39, wherein the one or more
13 behaviors are data shape-dependent.

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15 **41.** (Original) The method of claim 39, wherein the one or more
16 behaviors are data shape-dependent, the data shape being defined by the XML
17 document.

18
19 **42.** (Original) The method of claim 39, wherein the one or more
20 behaviors are independent of any XML schema.

21
22 **43.** (Original) The method of claim 39, wherein the one or more
23 behaviors are independent of data values.

1 **44.** (Original) The method of claim 39, wherein the one or more
2 behaviors are independent of one or more of: (a) any XML schema and (b) data
3 values.
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5 **45.** (Original) A software structure embodied on a computer-readable
6 medium comprising one or more crystals, each of which containing at least one
7 behavior and XSL-T for rendering XML into DHTML, the behaviors being data
8 shape dependent and being configured for use with common data shapes
9 independent of any XML schema.
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